An Aquatic Oniscid (Crustacea)

By W. H. Baker, Hon. Curator of Crustacea.

Text fig. 77.

Mr. Herbert M. Hale, of the South Australian Museum, who first noticed this species in the "Pool of Siloam", at Beachport, South Australia, supplies the following note:

"The 'Pool of Siloam' is a small, isolated lake, lying a little distance from the coast, and surrounded by sandhills. The water is at all times much salter than the sea, and is said to be beneficial to bathers suffering from rheumatism and other ills—hence the name. The aquatic *Philoscia* was obtained in January, 1920, on the bottom, or slightly buried in the sand, in about six feet of water, well away from the shore. Great numbers were present in this situation, but no specimens were found under the debris on the banks, although they were searched for there. The water in which the crustaceans were living was tested by the South Australian Government Analyst, who supplied the following details: Specific gravity, 1·078 at 60° F.; dissolved solids, 7,614 grains to gallon, of which 6,749 grains is common salt (over three times as salt as the sea). Numbers of Ostracods, a small red species of *Cyclops*, and some water-beetles were also present in the 'lake.'" Specimens collected by Mr. Hale are much beset with stalked infusorians.

Since the above date Mr. S. S. Stokes, on request, searched the "Pool of Siloam" during three separate visits to Beachport; two years after the first examples were obtained no specimens were found in the lake, but in 1924, and again in January of 1926, good series were captured. On the last occasion Mr. Stokes was informed by local residents that the same crustacean occurs in other salt swamps near Beachport.

The following is a description of the animal:

PHILOSCIA SALINA sp. nov.

There are the usual outstanding characters of the genus; the side-plates of the abdomen are, however, a little more outward projecting than usual. The body is sparsely beset with minute spinules, which are regularly arranged on the posterior margins of segments; also there are very many minute black spots irregularly arranged in longitudinal groups on the dorsal surface, otherwise the colour is pale.

The head is short, with two faint median lobes on the forehead. The eyes are moderate in size, lenticular, of about 26 ocelli. The minute anteunule consists of a stout basal joint, the 2nd joint narrowing distally, while the 3rd is very narrow. The antenna is short, the joints are clothed with minute spinules, its

flagellum is only a little longer than the 5th pedunculer joint, the three joints of the flagellum are short, the 1st and 3rd subequal, the middle one a little shorter. The left mandible has a 3-toothed incisory plate, a 5-toothed secondary

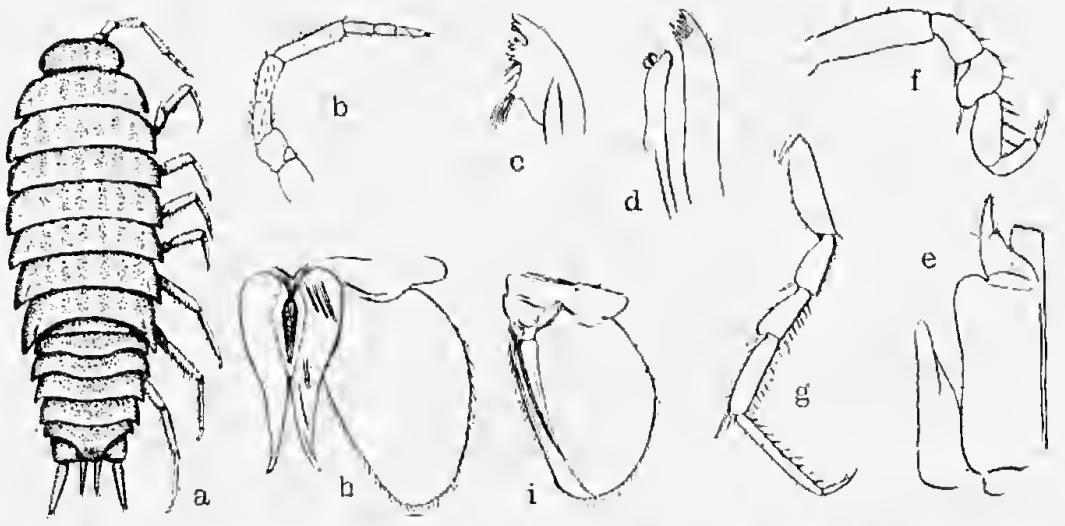

Fig. 77. *Philoscia saliua*, male: *a*, dorsal view; *b*, antenna; *c*, left mandible; *d*, first maxilla; *e*, maxilliped; *f* and *g*, first and seventh legs; *h* and *i*, first and second pleopods.

plate, with tuft of setae just below, then a single setum followed by the fascicle of setae which represent the molar process. In the right mandible the secondary plate is much smaller. The segments of thorax are subequal in length. Faint lateral lines mark off the epimera on the more posterior ones. The 6th segment of abdomen is a little excavate on its upper surface, and is obtusely pointed at the end. The 1st four pairs of legs are prehensile, that is, the propodus and dactylus are curved and capable of closing on the carpus. In the female the 4th pair has less prehensile character. In the 1st pair, which are shortest, the basos is the longest joint, the ischium short, the merus broader than long, the carpus about the same length as propodus and dactylus together: these joints are sparely spined. In the remaining pairs the spines are more numerous. The 7th pair is very long. The pleopods, owing to the large querenlar exopods, are very conspicuous. The 1st has the exopod fringed with delicate cilia, the endopod being modified into an *appendix masculina*, broad at base and slightly turned outwards at apex. The second pleopod also has the exopod fringed with cilia, especially on the inner side; the endopod is modified into a secondary sexual appendage, which is broad at base and tapers to a very fine end, reaching to the length of the exopod. The endopods of the succeeding pairs are short and fleshy. The 5th pair is smaller. In all the pleopods the peduncles are well developed. The uropods are short, with broad peduncles reaching a little beyond end of abdomen. The outer rami are awl-shaped and slender, the inner are also awl-shaped and shorter than the outer.

Length, 11 mm.; breadth, 4½ mm.

Type, male, in South Australian Museum, Reg. No. C. 792.